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ABSTRACT

A study was done to discover whether a program to change the reward structure for teaching at the University of Nebraska-Lincoln, a research-oriented university, had had an impact on faculty members' perceptions of the importance of teaching. Questionnaires were administered to 220 faculty in 12 departments in a pre-test and to 166 faculty in 10 departments in a post-test. Interviews were conducted with 24 faculty drawn from 12 departments in the first 2 years of the project, with an additional 18 in departments participating in Year 3 of the project. Results indicated that faculty in some departments are now more likely to perceive that somewhat less weight is given to research and publication and more to teaching in the university's tenure system. Members of some departments were more likely to agree that a climate favorable to teaching now exists in their college; that their department head spends more time talking about teaching in annual reviews; and that the evaluation system and the measure of effective teaching are adequate and valid. In addition, faculty in both colleges were more likely to agree that teaching is rewarded in the tenure system. The document includes 15 tables and appendixes containing a list of departments in the study, the interview format and the project questionnaire. (Contains 30 references.) (Author/JB)

Impact of An Intervention to Improve the Rewards for Teaching at a Research-Oriented University

A Paper Presented at the Annual Conference of the American Educational Research Association New Orleans, LA

April 5, 1994

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Impact of An Intervention to Improve the Rewards for Teaching at a Research-Oriented University[1]

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ABSTRACT

The study was undertaken to discover if the intervention of a program to change the reward structure for teaching at a research-oriented university had an impact on faculty members' perceptions of the importance of teaching in the Colleges of Arts and Sciences and the College of Agricultural Sciences and Natural Resources. Questionnaires were administered to 220 faculty in 12 departments in a pre-test and 166 in 10 departments in a post-test. Interviews were conducted with 24 faculty drawn from 12 departments in the first two years of the project, with an additional 18 in Year 3 departments. Results indicate that faculty in some departments are now more likely to perceive that somewhat less weight is given to the importance of research and publication and more to teaching in the tenure system. Members of some departments are more likely to agree that a climate favorable to teaching now exists in their college; that their department head or chair spends more time talking about teaching in annual reviews; and that the evaluation system and the measure of effective teaching are adequate and valid. In addition, faculty in both colleges are more likely to agree that teaching is rewarded in the tenure system.

INTRODUCTION

Nearly a decade ago, the report **Involvement in Learning** (Mortimer et. al. 1984) and a number of others which followed it (e.g., Bennett, NEH, 1984; AAC, 1985; Boyer, Carnegie Report 1987) provided a renewed stimulus for improving undergraduate education in American colleges and universities. One of the key recommendations in **Involvement in Learning** (Mortimer et. al. 1984) stated that

> College officials directly responsible for faculty personnel decisions should increase the weight given to teaching in the processes of hiring and determining retention, tenure, promotion, and compensation, and should improve means of assessing teaching effectiveness. (p. 59)

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[1] This study is a part of the final project report as found in Barrett, L.; Narveson, R.; Wright, D.; Bernstein, D. and Burkholder, A. (1992), **From Regard to Reward: Improving Teaching at a Research-Oriented University,** the Final Report submitted to the Fund for the Improvement of Postsecondary Education, by the Teaching and Learning Center, the University of Nebraska-Lincoln. (Grant number P116139161 2-90)

Faculty leaders, administrators, and instructional consultants at the University of Nebraska-Lincoln (UNL) were able to capitalize on this renewed call to improve undergraduate education and initiate programs to reward teaching.

In 1987 and in 1989 the Fund for the Improvement of Postsecondary Education (FIPSE) awarded grants to UNL to develop and implement a plan to alter the reward structure so that effective teaching might be recognized and rewarded. The 1987 FIPSE-funded study had determined that a majority of faculty members in the College of Agricultural Sciences and Natural Resources (CASNR) and the College of Arts and Sciences (A&S) believed that teaching was not adequately rewarded (McClain, 1987). The underlying assumption which formed the basis of the project "From Regard to Reward: Improving Teaching a Research-Oriented University," implemented in 1989, was that if good teaching is adequately rewarded, then faculty would devote more time to preparation for teaching, student needs would be better met, and undergraduate education would be improved.

The intervention of the "Rewarding Teaching Project" was planned as a "bottom up" and "top down" strategy. Members of the planning group leading the project in the two UNL colleges agreed that individual departments needed to examine issues in the context of their unit's missions, roles, aims, and cultures and to develop their own "Departmental Plan for Rewarding Teaching" which would be based o good practices in undergraduate education.[2] At the same time, university administrators including the deans of the colleges involved and the higher level administration would be requested to support the project and take leadership in rewarding effective teaching to the extent it could be documented.

The tasks of defining and documenting effective teaching was to be done at the departmental level. Departmental teams consisted of a key tenured faculty member or chair of the promotion and tenure committee; the department head or chair; and another key faculty member who was named as the "FIPSE coordinator." Their task was to spearhead the development of the departmental plan to reward teaching in their respective departments which was to be ready for piloting and implementation in a year's time. In the first year, 4 departments participated; in the second year, 8 more departments were invited to participate; by the third year, 14 more departments agreed to participate. In the first two years departments were evenly divided between the arts and sciences and agriculture colleges. In the third year, departments from Teachers College, the Dental College, and Engineering and Technology were also involved. Currently, 42 of the university's approximately 66 departments have been involved in the process.

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[2] The Rewarding Teaching Project provided for departmental and administrative teams. This study focuses on faculty practices; the means to the end was work with administrators--associate deans, deans, vice-chancellors, and chancellors of the university--which was highly important in removing barriers and providing legitimacy and visibility for the importance of the project. The attitude of these administrators was also monitored by interview but it is not part of this study.

RESEARCH OBJECTIVES

This study was undertaken to discover if the intervention of the Rewarding Teaching project had an effect on faculty perceptions of the rewards for teaching on the departmental and college levels. Three research questions regarding organizational change were asked:

1. Did changes in the reward structure for teaching change the attitude of faculty and administration toward teaching and research by college and department?

2. Are there any differences in organizational climate as perceived by faculty before and after the implementation of a changed reward structure?

3. What is the relationship of evaluations of teaching to granting of tenure, promotion, and merit pay?

As the project moved through its stages, it became clear that the original "research" intervention--altering the reward structure--could not be simply defined. An observable change in the reward system was the goal or end product of the intervention. However, the process of participating in the "FIPSE project" which involved much debate about evidence for effective teaching within specific disciplines became an intervention in itself. For the purposes of this study, therefore, the intervention is both the process and the product of "Rewarding Teaching."

RELATED LITERATURE

Studies of evaluating teaching in higher education in the 1980s often focused on how rewards are determined, what systems are in place, and the adequacy of such systems (Seldin 1980; Doyle 1983; Braskamp, Brandenburg, and Ory 1984; Miller 1987; Blackburn et. al. 1987; Magnesen 1987; Blackburn and Pitney 1988). These studies generally concluded that the systematic rewarding of teaching activity was not happening on the university level, and the measure of teaching performance was often confined to student evaluations of instruction and hearsay.

Other studies are concerned with documenting teaching activity through student evaluation of instruction. The question of the validity, reliability, and utility of student evaluations of instruction (e.g., Millman (ed.) 1981; Aleamoni 1981; Marsh 1984, 1987; Sherman et. al. 1987; Feldman 1989) constitute the large body of literature which is still being added to today.

Still another area of concern is what, exactly, constitutes "effective teaching" in higher education. We looked at criteria from a variety of sources (e.g., Sherman et. al. 1987; Chickering and Gamson 1987; Katz 1988). Effective teaching as it relates to disciplines was also an issue in early stages of discussion. In the "Rewarding Teaching" project, early planning groups and participants spent much time reviewing the literature on effective teaching, but ultimately no one set of criteria was developed.

Some studies address the impact that student evaluations of instruction when combined with peer or consultation may have on improving teaching (Menges 1987). This information was helpful in convincing others of the efficacy of an intervention. However, since this project did not focus on resources for improving teaching, the effect of feedback in this study cannot be demonstrated.

As noted earlier, various reports on the role of teaching in higher education, published in the 1980s, provided the impetus for the Rewarding Teaching project (Mortimer, et. al., 1984; Bennett, NEH, 1984; AAC, 1985; Boyer, Carnegie Report 1987). These reports were further substantiated by studies of perceptions of teaching rewards at research universities (Seldin 1984; Bassis 1986; Bowen and Schuster 1986; Blackburn et. al., 1987) and on our own campus (McClain 1987). Ernest Boyer's report **Scholarship Reconsidered** (1990) containing new perspectives on defining scholarly activity was also a valuable resource in convincing key faculty and administrators that teaching activity deserves to be given more emphasis in the university's reward structure and resources.

No study was found at the time the Rewarding Teaching project began actually examined how extrinsic rewards might alter faculty behaviors and perceptions. The relationship of theories of motivation to the behavior of faculty in higher education was discussed by Blackburn and Pitney (1988), but few specific studies were cited (p.15). In the early 1990s, other universities such as Stanford and Syracuse also began programs to improve the rewards for teaching. The idea of departmental plans as the main tool for intervention also predated the more current interest in teaching portfolios (Edgerton, Hutchins, and Quinlan 1991; Seldin 1993), but we have since incorporated this approach.

An organizational intervention to encourage the recognition of effective teaching in the reward system of a research-oriented university had not been previously undertaken on the scale we envisioned. Therefore measuring the impact of this intervention as the project unfolded had some benefit beyond the evaluation of the project itself. The methods we used and results of that intervention are discussed below.

METHODS

Because this study was undertaken as part of the plan for evaluating the impact of the Rewarding Teaching project, it presented both an opportunity and a problem. The events of the project and formative feedback had to take precedence over the research study. One way to overcome some of the difficulties encountered in studying the impact of programmatic intervention in situ, is use of multiple sources of data. Specific methods included use of the following:

1. Pre- and post-participation questionnaire
2. Participant interviews
3. Products and observable actions and changes

Population

Faculty members of departments participating in the Rewarding Teaching project filled out the pre- and post-test questionnaires. Two to three members of each participating department were interviewed. Over three years, 28 departments were involved in the Rewarding Teaching Project. Those departments included in this study are mainly the twelve departments from Years 1 and 2. (For various reasons, however, two of the original twelve departments could not be included in the post-test results.) Interviews of Year 3 departmental teams, conducted at the beginning of their involvement in the project, are used for some informal comparisons (interviewees drawn from 14 departments). (See Appendix A for a complete list of departments represented in this study.)

Questionnaires (Pre- and Post-test)

At the beginning of the first year, faculty in the four participating departments (English, Psychology, Agricultural Education, Agronomy) were administered a pre-test questionnaire. This was a seventy-four item in-house questionnaire which was based in part on previous work (McClain 1987; Chickering, et. al. 1989; Brown, Sime, and Ihle 1990). (See Appendix B for a copy of the questionnaire.) The process was repeated the second year with the departments of Geology, Mathematics, Political Science, Biometry, Biological Systems Engineering and Plant Pathology. During April of the third project year, these departments were given the same questionnaire as a post-test.

Altogether, 220 faculty members in 12 departments completed the pre-test questionnaire and 166 faculty members in 10 departments completed the post-test questionnaire. Statistical analysis was performed on the data using analysis of variance and least square means to determine significant differences.

Interviews

Interviews were conducted with departmental participants throughout the process for formative feedback. In addition, another set of interviews was conducted to amplify data gathered by questionnaire and to provide examples of actions taking place in the departments. (See Appendix C for a copy of the interview questions.)

Those interviewed for this study were members of the Year 1 and Year 2 departmental teams who had the responsibility of facilitating the development of the plan for their departments. These usually included the department head or chair, the chair of the promotion/tenure committee, and a faculty member who was named as the coordinator of the "FIPSE project." These individuals were regarded as leading the decision making in their departments.

Faculty from the 12 departments of Years 1 and 2, which were twelve to eighteen months alo . in implementing departmental plans, were interviewed in Spring 1992 (n = 24). Members of departments initiating their participation in Year 3 were also interviewed (number interviewed = 18). These were the only ones interviewed at the very beginning of their involvement in the process, and therefore some informal comparisons might be made between the comments they

expressed and those expressed by Years 1 and 2 participants after their involvement in the project.

Products and Observable Actions

In implementing the program, one decision of the project directors was to require participating departments to complete work on their departmental plans for rewarding teaching within the year. Most departments were able to produce departmental plans in some shape by the end of the academic year or by the following fall. These plans, which were completed by 11 of the 12 Year 1 and 2 departments, serve as the main observable products of this study.

RESULTS

1. Did a change in the reward structure for teaching change the attitude of faculty and administration toward teaching and research by college, and department?

Changes in faculty attitude toward teaching and research on both the college and departmental levels are determined by differences in attitudes expressed as tested on the pre- and post-test questionnaire. The change in attitude toward research vs. teaching was tested in questions regarding the importance of publishing, in hiring practices, teaching in the tenure process, and sources for teaching improvement, as discussed below.

Publishing Total mean scores (Table 1) indicate faculty agreed at pre-test time that publishing was more important than teaching in gaining tenure. The total mean for the pre-test was 2.44 (agree) compared to 2.57 (less certain) for the post-test. The faculty in the departments of Psychology and Agronomy changed their attitudes significantly from leaning toward research to being more undecided ($p < .05$). These two departments were two of the four first year departments; thus these changes occurred over a three-year period. At pre-test time the departments of Psychology and Agronomy agreed that it was more important to publish than teach well. English and Agricultural Education did not agree. In the post-test not one of these departments agreed that it was more important to publish than teach well. Although the mean score for all departments did not change significantly from the pre-test to the post-test, there was a clear indication in the data that a shift of attitude was toward more equal regard for teaching.

Comments gathered in interview also reflect a shift in attitude. Those at the beginning of the process--Year 3 interviewees serving as an informal comparison group--were more likely to say that the message is research is more important than teaching. Those near the end of the process (Years 1 and 2) were more thoughtful and reflective on this issue. While no one in either group expressed confidence that someone could be promoted or tenured if they have no research or scholarly record, the importance of teaching in personnel decisions appears to be making headway.

Hiring Practices The shift away from the paramount importance of research is also observable in the question regarding hiring practices. In response to the statement "in hiring, there is as much emphasis placed on demonstrated teaching ability as on potential scholarly

responsibility" all departments showed a significant difference between the pre-test and post-test responses (Table 2). After project participation, faculty tended toward agreeing with the statement. The total difference in means for all departments was significant ($p < .001$), the pre-test score was 3.17 (undecided) and the post-test score 2.54 (agree). The most significant shift in attitude was in the Psychology department with English, Agronomy, Biometry and Biological Systems Engineering also showing significant changes in perception toward agreeing that teaching was gaining more importance in hiring. This change in attitude can be tied to the efforts of the deans of both colleges insisting that job candidates demonstrate their teaching ability to live classes, and faculty awareness that teaching needs to be improved.

In comments gathered in interview, faculty pointed out that in the hiring process, the goal has been to look for strong teachers and researchers, but entry-level candidates often lack teaching credentials. This lack is remedied usually by making judgments based on letters of recommendation and by judging teaching ability on the candidate's presenting a research seminar or colloquium. While some departments are considering changes in interview structure, only one department at the time of the interviews attempted to have candidates do a teaching demonstration. This activity is attributable to the Rewarding Teaching project. For almost all departments, the hiring process is at least a point where effective teaching is mentioned and the importance of teaching in the department is emphasized. The Rewarding Teaching project therefore has reinforced a focus on teaching credentials or teaching potential.

Research and Teaching in Tenure As a result of the Rewarding Teaching project, faculty attitudes shifted somewhat away from a focus on the importance of research. Response to the item "research should be an important factor in order to gain tenure" revealed significant change in faculty attitude (Table 3). The total mean for the pre-test of 1.62 agree and post-test of 2.09 was a significant change away from importance of research ($p < .001$). The original four departments had the greatest change in attitude in that a shift away from agreeing that research was such a strong factor in determining tenure. As departments defined the nature of scholarship and developed their plans to reward teaching, this could have had an impact on the findings. Departments established specific criteria on how teaching would be evaluated and how those activities would fit into the reward system.

Faculty also became more likely to say that the university's tenure system encourages interest in teaching (Table 4). The total mean for the pre-test of 3.35 (undecided) and the post-test mean of 2.49 (toward agree) was significantly different ($p < .001$). The department of Psychology had the greatest change in attitude (from disagree to agree strongly) followed by the departments of English and Agronomy.

As noted above, in interview, faculty in the Year 1 and Year 2 departments said that teaching had gained in importance in the tenure process.

It is evident that the length of time involved in the Rewarding Teaching project played a part in creating change in attitude. It should be noted in (Table 4) that the original departments of English, Psychology, Agricultural Education and Agronomy seemed to change the most in attitude. Total mean scores although not always significantly different did change in the direction of the original departments. Even though the project was working in two colleges where the

cultures were quite different, no significant differences occurred between colleges.

Improving Teaching Data were combined from several test items on the questionnaire to give a score for improvement-seeking behavior (Table 5). There were no differences in total mean from pre-test to post-test; faculty were undecided as to their own efforts to improve teaching or to seek assistance. A negative change from pre-test to post-test was indicated in the College of Agricultural Sciences and Natural Resources: pre-test 2.82; post-test 3.04 ($p < .05$). The departments of English and Agronomy also had negative scores. The department of Geology was the only department to indicate an increase in teaching improvement activity: pre-test 3.38; post-test 2.59 ($p < .05$).

The lack of significant improvement in scores in the College of Agricultural Sciences and Natural Resources (CASNR) may be due to events beyond the Rewarding Teaching project. For example, there was less visible activity by the College's instructional improvement committee. Results may also indicate that faculty are being asked to do more and more activities with less time left for professional improvement of teaching. Pressure to apply for research grants has increased. During the period of the project, funded research projects in both CASNR and Arts and Sciences increased approximately 30 percent.

Interviews and observable products, however, reveal that individual faculty members and departmental groups do seek out means of improving teaching. In interview, activity such as conversations about teaching, attendance at teaching improvement workshops, and departmental events focused on teaching were mentioned. Departmental plans to reward teaching include involvement in teaching improvement activities such as attending workshops to improve teaching. Efforts to improve teaching are not entirely lacking, even if they may not have occurred uniformly across the departments.

One difficulty with collecting data regarding teaching improvement is that the Rewarding Teaching project did not direct any resources toward assisting faculty or departments to improve teaching in specific ways. Resources already on campus, including the services of an established Teaching and Learning Center, were judged to be adequate at the start of the project. The lack of change noted here is not surprising. An explicit mechanism is needed to promote improvement activities which meet faculty's needs in specific ways.

2. Do faculty perceive differences in the organizational climate after changes in the reward structure?

At the beginning of the project faculty perceptions regarding the climate for teaching on the departmental and college levels were mixed (McClain 1987). Perceptions of climate were tested by several items on the questionnaire, both directly and indirectly, and in interviews. Faculty were asked directly to rate the favorability of the climate for teaching in the department and college. Responses yield conflicting data (Tables 6 and 7).

Climate on the college level In the two colleges, data (Table 6) indicate a positive shift in the climate for teaching improvement in the total mean; the pre-test was 2.47 and the post-test was 2.07 (agree, $p < .001$). While faculty in the CASNR agreed during pre-test and post-test that

a favorable climate existed, faculty in Arts and Sciences scored the climate significantly higher in the post-test. The most significant changes by department in regard to the climate on the college level were in English and Psychology, each moving from being undecided in the pre-test to agreeing in the post-test that a favorable climate existed in the college. The favorable changes in English and Psychology were probably influenced by the actions of the dean of the College of Arts and Sciences to provide extra merit pay to deserving teaching faculty.

Climate on the departmental level In departments (Table 6), the total mean indicates change in attitude toward a negative direction: pre-test 2.07 (agree) and post-test 2.68 (undecided, $p < .001$). The departments of English, Psychology and Agronomy moved from agreeing that a favorable climate existed at pre-test time to being undecided during post-test. The Plant Pathology department, primarily a research department, moved from undecided in the pre-test to strongly agree in the post-test. In this last named department, a shift in attitude is likely due to implementation of the department's plan to reward teaching, where none existed before.

The significant negative shift in opinion in the three original departments may be due to a realization that the climate for teaching in the departments may not have been as good as it first was, as members of these departments grew more knowledgeable about teaching and had expanded their vision of the ideal.

The differences between the ratings of climate on the department level and the college level may be due to a perception that within the department, "publish or perish" is still alive and well. This contrast in climate may indicate that it is easier to create a perception of change at the college level than within the department.

Climate as reflected in interviews In the interviews of those at the beginning of the process (Year 3--informal comparison group), little specific evidence could be derived to demonstrate that the climate for teaching was more than what might be expected--some bows made toward teaching but many complaints about the dominance of research, no evidence of any extraordinary teaching improvement activity, and, of course, no departmental plans.

Departments of those interviewed from Years 1 and 2 appear to fall into three categories: three departments where the climate has not improved; two departments who were already content with the weight given to teaching activity; and seven departments where major innovations in rewarding teaching reflect an improved climate.

In three departments little or no change was detected in interviews. For example, in one department one person said that the Rewarding Teaching project made little or no difference and added, ironically, that the reward for effective teaching is being assigned to teach "more freshman courses." In another department, the faculty ultimately decided not to participate; the debate over FIPSE in this department, however, made it easier for the head to stress documentation of teaching activity on the staff activity report. The third department, a large one, claimed to reward effective teaching very well, but innovations in the reward structure were used only by a few and with disappointing results.

Two departments were already pleased with their rewards for teaching but made use of resources in the Rewarding Teaching Project to reflect on and to revise current practices. In both of these departments a fairly careful system of student evaluations of instruction had been in place for sometime and quantification of results appears largely accepted by the faculty.

Those interviewed in seven departments in Years 1 and 2 gave clear indication of change in practice and experienced positive change in the climate for teaching. Three of these perhaps did not move very far, but nevertheless something happened. In the case of a heavily research-oriented department, both individuals interviewed agreed that research, not teaching, has the most reward. However, both said that the climate for teaching had changed, that individuals engaged in teaching were more "enthusiastic," that a plan for rewarding teaching was in place and could be used, and that a study focusing on teaching graduate students had been initiated. Another unit was in the midst of a change in its chief administrator. It already had a range of forms used by students to evaluate the different kinds of teaching happening in this unit and a system for giving feedback. The plan the members of the department developed, however, called for anyone who wanted a merit increase to submit evidence. Consequently, the executive committee was observed spending some length of time reviewing a "cartload" of materials submitted by 40 of their colleagues, apparently without complaint by either side. A third department, which claimed to give rewards based on effective teaching at the start, wrote and tested a departmental plan in a pilot run judged to be moderately successful.

In the four remaining departments, a climate which supports effective teaching is evident, as reflected in interview. These departments are characterized by strong leadership provided by the department head or chair; equally strong faculty leadership; and varied, specific, and creative activities developed to accompany the departmental plan. For example, in one department "Teaching Circles" were formed where faculty members could discuss teaching issues on a regular basis. Other activities in this department include mentoring of new faculty and a renewed orientation program for graduate teaching assistants.

In another department, the departmental plan focused on improving teaching. A Teaching Panel, separated from panels for research and service, reviews individual faculty. In another change, the position of Teaching Coordinator was upgraded to a 100 percent/12 month appointment. Also instituted was a five year course review, in which individual courses are examined by peers and an instructional consultant. Resources went to improving teaching facilities that might ordinarily have gone elsewhere. As one person remarked, the department plan to reward teaching is so ingrained that any change in department administration could not dislodge it easily. The department head noted that even the researchers support rewards for effective teaching.

In the other two departments, departmental head support, classroom visitation, graduate student training, a teaching seminar conducted by job candidates, and production of an "Educational Portfolio" for students and teachers are activities engendered by a climate supportive of teaching. These departments also connected major curriculum revision with improving the climate for teaching and hence the reward system.

Departmental leadership Another element of climate is the role departmental leaders play in encouraging the teaching efforts of faculty. Responses to the question of the amount of time the department head spoke to faculty about teaching goals can reveal information on climate (Table 8). On this item, the total mean for the pre-test was 3.40 (some extent) and the post-test score was significantly different at 2.31 (great extent, $p < .001$). Overall, department chairs and heads spent more time addressing teaching goals in later years than at the start of the project. All four of the original departments had a significant shift in amount of time spent talking about teaching goals during the annual review process. This action by department heads is visible to all faculty, and has made an impression.

Additional data (Table 9) indicate a shift which complements the above change. Faculty were asked to rate the amount of time the department head spoke about research goals. The total mean for the pre-test was 2.97 (great extent) and the post-test was 3.32 (some extent, $p < .01$). The departments of English and Agronomy had the highest pre-test scores, indicating that department heads spoke less about research goals during the annual review process the third year.

In interview, it was evident in comments made that departmental leadership did become more visible in support of teaching. In two CASNR departments, the heads who had originally been viewed as heavily research-oriented not only supported teaching improvement verbally, but also by visits to the classes of their faculty.

Time spent in teaching activity Another piece of evidence for improved climate is the importance faculty members attached to spending time and effort in teaching activities. Questions such as "professors get to know students in their classes quite well" were asked of respondent faculty about their activities concerning teaching. Data in Table 10 is a composite subscale for all those activities. The total pre- and post-test means were both in the "agree" range, with the pre-test mean 2.13 and the post-test was 2.37. By post-test time, there was a slight but significant ($p < .001$) shift away in total means from agreeing positively with the importance of teaching activities. The greatest negative shift was in the departments of English and Agricultural Education; both moved from agree to being undecided. Two departments had a positive change: Political Science and Plant Pathology. Both moved to agree in the post-test. Overall, change toward less positive response may be due to how faculty perceive themselves. Data collected during the first year of the project indicate that faculty believed then that they are doing a good job in teaching activities, and that perception did not change much in the final year. Another factor contributing to this slight negative score may be a realization from newly acquired teaching knowledge that there is still room for improvement.

3. Is there a positive relationship between evaluations of teaching and the granting of tenure, promotion, and merit salary?

At the heart of the Rewarding Teaching project is the intention to have a positive impact on the reward structure as expressed in the granting of tenure, promotion, and merit pay. It was widely held that the practice of evaluating teaching had to change if rewards were to occur. Questions dealing directly with the reward structure included perceptions regarding the evaluation of teaching activity, the use of merit pay, the promotion and tenure system, and use of other rewards.

Adequacy and validity of evaluations of teaching Faculty were asked to respond to six questions concerning the adequacy of the teaching evaluation system (summed in Table 11). The total mean for the pre-test was 3.23 (undecided toward disagree) and the post-test was 2.90 (undecided toward agree, $p < .01$). Both Colleges experienced a significant positive shift toward agreeing that the system was adequate. Three of the original four departments had a positive shift, Psychology, Agricultural Education and Agronomy, in addition to the Year 2 department of Biological Systems Engineering. Many faculty were still unclear about the adequacy of their teaching evaluation system at the end of the project period. However, three of the four original departments in the project, who had the most experience changing their evaluation systems, changed their perceptions of the evaluation system the most.

Faculty in the post-test also were more likely to agree that the departmental system validly measures effective teaching (Table 12). In the pre-test the over-all mean score was 3.08 (undecided), while the post test was 2.61 (toward agreement, $p < .01$). Means for the Colleges showed a similar movement. Two of the Year 1 departments (Agronomy and Psychology) also showed significant changes toward agreement, while most other departments showed trends in that direction.

Comments and examples collected in interview give insight into the change in both perception and practice regarding the system for evaluation of teaching. Those who were interviewed at the beginning of the process (Year 3--informal comparison group) revealed that student evaluations of instruction were virtually the only evidence used to judge effective teaching. There was considerable uneasiness about trusting this single source of information. This feeling was coupled with a general vagueness about other kinds of evidence; "hearsay," "grapevine," "informal," "not systematic" were words and phrases used by those in this group. Although some department heads, chairs, and executive committees used other kinds of information, such as exit interviews, to make judgments regarding the quality of teaching, no one in this group had a formal plan to reward teaching. One department administrator said that he was open to using other information such as innovations in curriculum and course development, but faculty members never mentioned these activities in their annual reports.

Those interviewed from Years 1 and 2 indicated that the amount of documentation of teaching activity increased and that the process became better structured and organized as a result of participation in the Rewarding Teaching project. In these departments, all but one had written departmental plans to reward teaching on file. The idea of portfolio evaluation had also taken hold. Evidence included categories of student, self, and peer evaluations. There were systematic ways of gathering and submitting evidence for annual merit increases and for promotion/tenure files. Questions of who had to submit materials, what was required, and what was optional were being addressed. Related activities were also occurring. Mention was made of teaching innovations, curriculum renewal, teaching publication, classroom research, and classroom visitation.

Merit Pay Data (Table 13) indicate the degree that faculty believe merit increases should be tied to teaching performance. There were no differences between total mean scores between pre-test and post-test; faculty agreed both times that merit should be tied to teaching performance. The English department was the only department to move from a pre-test of strongly agreeing to

being undecided three years later on the post-test.

The majority of those interviewed claimed that effective teaching was rewarded by salary increases. Comments by those in Years 1 and 2, however, suggest that as a result of the Rewarding Teaching project, effective teaching can be more precisely rewarded. This reward is based on new kinds of evidence coming into the personnel file. Merit pay for teaching can be awarded based on the percentage of appointment multiplied by a numerical score derived from multiple sources of evidence. Therefore teaching activity appears much more justifiable in merit increases and hence has become integral to the personnel system. Although merit pay has been reportedly given for teaching for years, teaching had been slighted not only because of weak documentation but also because of the lack of importance attached to teaching. Interview data suggest that the Rewarding Teaching project attacked both these problems and helped faculty participants find solutions.

Promotion and Tenure Significant changes occurred in perception regarding the granting of tenure as a reward for teaching (Table 14). Two questionnaire items relating to tenure and promotion were combined to reveal a change in a positive direction occurred in the total mean scores. The total pre-test score was 2.64 (undecided) and the post-test score was significantly different (2.15, agree, $p < .001$) Faculty perceived that there was a significant positive change in the relationship of tenure as a reward for teaching. The departments of Psychology and Agronomy had significant shifts in perception regarding tenure from being undecided to agreeing that tenure was a reward for teaching activity. This change in attitude may be due to implementing a new promotion and tenure policy in the University, the writing of departmental plans in the project departments, and making available information workshops for promotion/tenure committees.

In opinions expressed in interviews, there is less clarity about the role teaching plays in the tenure process. In decisions regarding tenure, most of those interviewed assert that they award tenure to good teachers with respectable research records or good researchers who have adequate teaching. In the College of Agricultural Sciences and Natural Resources (CASNR), those interviewed pointed to the role the stated percentages of an individual's appointment play in the tenure process. In one department, for example, teaching was going to be considered as a "major factor" in achieving tenure because the faculty member had a 65 percent teaching appointment. A reoccurring theme reflected in the comments of those interviewed in the College of Arts and Sciences (A&S) is that good teachers are tenured because the incompetent teacher is not re-hired. Departments in this college also are assigned percentages of teaching, research, and service to individual faculty and base tenure decisions accordingly.

In promotion, according to those interviewed, teaching may play a significantly more important role than it had played previously. The percentages of an individual's appointment are more clearly taken into account, as reflected in the comments made by most of those in the Years 1 and 2 group. The promotion to associate professor usually comes with the granting of tenure. In a few cases, the promotion in rank may be equally delayed if teaching needs some improvement or if research in progress is not yet published.

The role of effective teaching in promotion to full professor is much more problematic. In the College of Arts and Sciences (A&S) the issue is "hotly" debated. The Rewarding Teaching project apparently has added more fuel to that fire without a resolution emerging. One professor who is a member of the A&S Executive Committee flatly said that the dean opposes promotion to full professor even for the most outstanding teachers who lack good research credentials. However, a senior professor in another department noted that the dean is willing to promote outstanding teachers if they can demonstrate peer recognition on a national basis. He saw some possibility in that avenue.

In the College of Agricultural Sciences and Natural Resources (CASNR), the issue is less polarized. Those interviewed in some CASNR departments indicate that promotion to full professor based on strong teaching credentials was possible if the major portion of the individual's appointment was in teaching. This stance, claimed by several departments, is not attributed to the Rewarding Teaching project. Participation, however, "cemented in" teaching effectiveness as part of the promotion-tenure process.

Other rewards for teaching Faculty perceptions of other rewards given for effective teaching are mixed. Faculty perceive some support for release time and other resources to develop teaching (Table 15). There was a shift in perception from a pre-test score of 3.21 (undecided) to 2.83 (undecided toward agree, $p < .001$) for the total mean. The four original departments of English, Psychology, Agricultural Education and Agronomy shifted their opinions from being undecided to agreeing that they were receiving more support. It is evident that there is uncertainty among faculty who have not been in the project very long about whether they have strong support to develop their teaching. Some of this uncertainty can be a function of hard economic times when each faculty is expected to shoulder a greater load.

Many of those interviewed commented that the reward for teaching must go beyond the merit and promotion system. Peer pressure or the culture does play a part. Effective teaching must have "high status" in the eyes of faculty members. One reward often mentioned is a nomination for a distinguished teaching award, within the department, the college, or the university or regionally or nationally. Two departments could claim that a large number of their senior faculty members had won distinguished teaching awards; another unit was becoming aware of the role of the department in seeing that worthy teachers were nominated. One difficulty with emphasizing the importance of teaching is increasing teaching load. While forces are at work to increase teaching load and numbers of students in classes, this trend can be viewed by the faculty only as punitive.

Observable Actions and Changes

The most impressive products are the plans to reward effective teaching by department. Plans to reward teaching by department are available in 11 of the 12 departments in this study and 25 of 28 participating departments overall.

On the administrative level, deans in the College of Arts and Sciences and in the College of Agricultural Sciences and Natural Resources spelled out explicit rewards, such as extra dollars for merit pay, for those departments that participated in the rewarding teaching project and

demonstrated teaching effectiveness. On the university systems level an annual $25,000 award has been established to reward departments that can substantiate outstanding teaching.

There is also some evidence expressed in interview that substantiates changes to improve practice in undergraduate teaching. The new departmental plans calling for multiple pieces of evidence for effective teaching apparently have stimulated a variety of new teaching activities. As a result of participation in Rewarding Teaching, the following activities, which can be related to student-centered teaching and learning, were reported, for example:

--engaging in the Teaching Analysis Process;
--using tools for classroom observation;
--improving performance of upper-division students;
--developing an Educational Portfolio for students;
--changing courses or curricula;
--offering new orientation for teaching assistants;
--spelling out a Course Review Process.

The intervention which constituted the Rewarding Teaching Project resulted in having a plan to reward teaching in the reward system stated explicitly in a tangible document which one could hold in the hands. The impact, however, has to go beyond the compiling of a document. Anecdotal and case by case evidence suggests that the plans in place are being used to evaluate teaching on departmental levels.

CONCLUSIONS

Summary

A study of the Rewarding Teaching project indicated that changes in attitude and behaviors occurred, as determined by pre-post testing, interviews, and observable products and actions. The following summary statements describe what faculty say after participating in the Reward Teaching project:

1. Faculty are less certain now that publishing is more important than teaching; they are less likely to say that it is more important to publish than to teach well.

2. Faculty are more likely to say that the hiring practice emphasizes teaching as much as research.

3. Faculty attitudes have moved somewhat away from research toward teaching in weighing their relative importance in the tenure system.

4. Faculty did not change in the likelihood of seeking out resources for teaching improvement.

5. The climate for teaching was reported as more favorable on the college level, but less favorable in three departments.

6. Department chairs and heads, in annual performance reviews, were more likely to address teaching issues and give less time to research than previously reported.

7. Faculty are more likely to say that rewards for teaching are both adequate and validly measured.

8. Faculty continue to agree that merit pay should be used to reward teaching.

9. Faculty are more likely to say that the promotion and tenure process rewards effective teaching.

10. Faculty in departments involved the longest are more likely to say that other kinds of rewards (facilities, distinguished teaching awards, other resources) support teaching.

Discussion

While changing times and events may have had some impact on the faculty in the departments participating in the Rewarding Teaching project, there was a discernible change in faculty attitudes toward being more positive in the perceived importance of teaching in the departments and the two colleges. These attitudes are apparently based on changing practices, such as the use of multiple sources of data ("portfolio evaluation") in evaluating teaching, in voiced support for teaching at the departmental, college, and university levels, in resources being directed toward teaching, and in the development and publication of the departmental plans to reward effective teaching activity.

When the intervention appeared to be successful, a combination of conditions seemed to be at work. Some of these which surfaced in interviews are:

1. A chair or head, sometimes new, found resources to grow in knowledge about teaching. As one new head remarked, the faculty told him: "We expected to get a research leader, not a teaching leader!" Their approval apparently matched their surprise.

2. Strong faculty leaders developed and led programs with a variety of activities made the entire culture say "teaching is important." These included Teaching Circles meeting regularly over pizza for lunch and mentoring new faculty in one department. In another it was having a candidate presenting a teaching demonstration before faculty and graduate students.

3. The departmental plan was a product of collaboration within the unit, agreed upon and implemented by everybody, with the department's executive committee giving special attention to all the material collected. On the other hand, the more that was left "voluntary," the less satisfied individuals were. A plan written by a department chair or a few persons was generally disregarded.

4. The reputation of traditional documentation of teaching was refurbished. Departmental faculty members reaffirmed the importance of student evaluations of instruction. For example, materials requested in the Guidelines for the CASNR staff activities report were not particularly augmented, but a department head noted that his faculty now knows he takes the materials seriously.

Lessons Learned

What, then, might be some applications of lessons learned from this study? Some recommendations for application are:

1. Focus attention on teaching improvement or making teaching central to the social life of the department.

2. Find new ways--teaching portfolios, departmental plans--to define and document teaching activity.

3. Find additional ways to reward teaching, such as nominations for teaching awards on departmental, college, university, and national levels.

4. Win researchers over to supporting rewards for effective teaching.

5. Communicate the importance of good teaching in the hiring process and attempt to ascertain candidates' teaching ability.

6. Relate teaching improvement to curriculum renewal and make it an exciting futuristic activity, and connect teaching rewards to participation.

7. Identify resources to improve teaching and encourage faculty to engage in continuous improvement.

Questions for further study

Our study suggests that organizational climate and faculty perceptions of rewarding teaching can be altered with a clear-cut intervention which requires faculty participation and action. There are many questions, however, left unanswered. Can we draw a closer link between perceptions and behavior? How can one measure the impact rewarding effective teaching has on student learning outcomes? Is there a difference between intrinsic vs. extrinsic rewards in bringing about changes in perceptions and behavior? What are the differences and similarities between the impact of reward systems on teaching in settings outside of the University of Nebraska or at other research-oriented universities? Given a variety of programs now addressing the issues of rewards for teaching, such as the Roles and Rewards and Peer Review initiatives of the American Association of Higher Education, more studies linking the reward to outcome should be forthcoming.

Table 1

Pre-test and Post-test Mean Scores for:
It is More Important to Publish than Teach Well
by College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	136	2.46	1.25	108	2.51	1.18
CASNR	85	2.42	1.23	58	2.67	1.26
Department:						
Three Years:						
English	36	2.69	1.39	43	2.73	1.18
Psychology	15	1.80*	1.01	16	2.63	1.31
Agricultural Education	9	3.33	1.41	8	3.00	1.30
Agronomy	29	1.96**	1.02	25	2.96	1.09
Geology	10	2.10	1.19	5	2.60	1.14
Two Years:						
Mathematics	30	2.37	1.03	30	2.23	1.17
Political Science	12	1.75	1.14	14	2.29	1.14
Biometry	6	2.50	1.04	5	2.40	1.67
Biological Systems Engineering	13	2.69	1.25	16	2.31	1.30
Plant Pathology	5	1.40	.54	4	2.00	1.41
Total Mean	221†	2.44	1.23	166	2.57	1.21

Note.

1.0 = Strongly Agree; 2.0 = Agree; 3.0 = Undecided; 4.0 = Disagree; 5.0 = Strongly Disagree

*p < .05; **p < .01

†Total N for Pre-test includes departments not in Posttest.

Table 2

Pre-test and Post-test Mean Scores for:
Teaching is Emphasized as Much as Scholarship in Hiring
By College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	136	3.11	1.25	108	2.56	1.04
CASNR	84	3.26	1.04	58	2.48	1.10
Department:						
Three Years:						
English	36	2.92	1.30	43	2.30**	.86
Psychology	15	3.81	.72	16	2.38***	.80
Agricultural Education	9	2.66	1.11	8	2.25	.89
Agronomy	28	3.00	1.12	25	2.28*	.94
Two Years:						
Geology	10	3.90	1.10	5	3.20	1.09
Mathematics	30	3.40	1.13	30	2.93	1.20
Political Science	12	3.08	1.38	14	2.57	1.22
Biometry	6	3.50	.55	5	2.20*	1.09
Bio Systems Engineering	13	3.46	.97	16	2.56*	1.21
Plant Pathology	5	4.20	.45	4	4.25	.50
Total Mean	220†	3.17	1.18	166	2.54***	1.06

Note.

1.0 = Strongly Agree; 2.0 = Agree; 3.0 = Undecided; 4.0 = Disagree; 5.0 = Strongly Disagree

*p < .05; **p < .01; ***p < .001 by T test

†Total N for Pre-test includes departments not in Posttest.

Table 3

Pre-test and Post-test Mean Scores for:
Research Should be an Important Factor to Attain Tenure
by College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	136	1.54	.82	109	2.07	1.09
CASNR	84	1.76	.84	58	2.14	1.03
Department:						
Three Years:						
English	36	1.47***	.65	42	2.88	.89
Psychology	15	1.27***	.46	16	2.56	1.15
Agricultural Education	9	1.67**	.71	8	2.75	1.03
Agronomy	28	1.43***	.57	25	2.48	.87
Two Years:						
Geology	10	1.70	1.25	5	1.40	.55
Mathematics	30	1.23	.50	52	1.22	.49
Political Science	12	1.17	.39	14	1.29	.47
Biometry	6	2.17	1.17	5	2.00	1.00
Biological Systems Engineering	13	1.92	1.04	16	1.44	.81
Plant Pathology	5	1.40	.89	4	1.75	1.50
Total Mean	220†	1.62***	.84	167	2.09	1.07

Note.

1.0 = Strongly Agree; 2.0 = Agree; 3.0 = Undecided; 4.0 = Disagree; 5.0 = Strongly Disagree

**p < .01; ***p < .001 by T test

†Total N for Pre-test includes departments not in Posttest.

Table 4

Pre-test and Post-test Mean Scores for:
UN–L Tenure System Encourages Interest in Teaching
by College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	136	3.31	1.28	109	2.30	1.27
CASNR	84	3.33	1.03	58	2.84	1.29
Department:						
Three Years:						
English	36	3.39	1.29	43	2.51***	1.38
Psychology	15	3.80	1.01	16	1.44***	.51
Agricultural Education	9	3.56	.73	8	3.25	1.28
Agronomy	28	3.32	1.02	25	2.40**	1.26
Two Years:						
Geology	10	3.80	1.23	5	3.60	1.14
Mathematics	30	2.40	1.13	31	2.13	1.23
Political Science	12	3.33	1.30	14	2.57	1.09
Biometry	6	2.17	1.17	5	2.60	1.14
Biological Systems Engineering	13	3.54	.96	16	3.44	1.15
Plant Pathology	5	4.00	1.22	4	2.75	1.71
Total Mean	220†	3.35	1.18	167	2.49***	1.30

Note.

1.0 = Strongly Agree; 2.0 = Agree; 3.0 = Undecided; 4.0 = Disagree; 5.0 = Strongly Disagree

**p < .01; ***p < .001 by T test

†Total N for Pre-test includes departments not in Posttest.

Table 5

Pre-test and Post-test Mean Scores for Subscale:
Faculty Made Efforts to Improve Teaching
by College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	136	3.11	.63	110	3.07	.68
CASNR	84	2.82*	.67	51	3.04	.70
Department:						
Three Years:						
English	36	2.80*	.68	43	3.10	.83
Psychology	15	3.12	.62	16	3.25	.53
Agricultural Education	9	2.22	.66	8	2.75	.80
Agronomy	29	2.80*	.63	25	3.16	.58
Two Years:						
Geology	10	3.38	.61	5	2.59*	.80
Mathematics	30	3.23	.51	32	3.04	.56
Political Science	12	3.18	.68	14	3.06	.57
Biometry	6	2.77	.53	5	2.76	.38
Biological Systems Engineering	13	2.97	.76	15	2.89	.80
Plant Pathology	5	3.21	.80	4	3.75	.66
Total Mean	220†	2.99	.66	167	3.06	.69

Note.
Combined Questionnaire Items 52-56

1.0 = Strongly Agree; 2.0 = Agree; 3.0 = Undecided; 4.0 = Disagree; 5.0 = Strongly Disagree

*$p < .05$

†Total N for Pre-test includes departments not in Posttest.

Table 6

Pre-test and Post-test Mean Scores for:
Favorable Climate Exists in My College for Improvement of Teaching
by College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	128	2.68	1.02	103	2.08*	.98
CASNR	79	2.11	.85	58	2.06	.89
Department:						
Three Years:						
English	35	2.97	.92	41	1.98***	.96
Psychology	14	3.07	1.20	16	1.62***	.96
Agricultural Education	9	1.77	.83	8	1.87	.99
Agronomy	25	1.92	.91	25	2.08	.86
Two Years:						
Geology	10	2.70	1.03	5	2.60	1.14
Mathematics	30	2.13	.86	27	2.41	.97
Political Science	12	2.25	1.13	14	2.07	.82
Biometry	5	2.40	.55	5	2.40	.55
Biological Systems Engineering	13	2.62	.96	16	2.19	1.05
Plant Pathology	5	2.40	1.14	4	1.50	.58
Total Mean	207†	2.47	.99	161	2.07***	.95

Note.

1.0 = Strongly Agree; 2.0 = Agree; 3.0 = Undecided; 4.0 = Disagree; 5.0 = Strongly Disagree

*p < .05; **p < .01; ***p < .001 by T test

†Total N for Pre-test includes departments not in Posttest.

Table 7

Pre-test and Post-test Mean Scores for:
Favorable Climate Exists in My Department for Improvement of Teaching
by College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	130	2.03	.97	104	2.70	1.24
CASNR	81	2.14	.89	56	2.66	1.15
Department:						
Three Years:						
English	35	1.65***	.83	41	3.31	1.12
Psychology	15	2.73**	1.16	16	3.63	.80
Agricultural Education	9	2.11	.78	7	2.71	1.25
Agronomy	25	1.88***	.97	24	3.33	1.01
Two Years:						
Geology	10	2.70	1.06	5	2.60	1.14
Mathematics	30	1.73	.69	28	1.89	.87
Political Science	12	1.75	.86	14	1.50	.52
Biometry	6	2.00	.63	5	2.20	.45
Biological Systems Engineering	13	2.61	.86	16	2.06	.99
Plant Pathology	5	2.80	1.64	4	1.50*	.58
Total Mean	211†	2.07***	.94	160	2.68	1.20

Note.

1.0 = Strongly Agree; 2.0 = Agree; 3.0 = Undecided; 4.0 = Disagree; 5.0 = Strongly Disagree

*p < .05; **p < .01; ***p < .001 by T test

†Total N for Pre-test includes departments not in Posttest.

Table 8

Pre-test and Post-test Mean Scores for:
Amount of Time Department Head Spoke to Faculty about
Teaching in Annual Review of Goals
by College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	129	3.60	1.07	105	2.34	1.34
CASNR	79	3.09	.94	56	2.25	1.22
Department:						
Three Years:						
English	34	3.29	1.09	43	1.47***	.67
Psychology	15	4.33	1.11	16	1.38***	.50
Agricultural Education	9	3.11	.93	8	1.63***	1.06
Agronomy	28	2.96	.96	25	1.48***	.65
Two Years:						
Geology	10	3.70	1.25	5	3.20	.45
Mathematics	27	3.14	.92	27	3.04	.98
Political Science	11	4.36	.81	14	4.50	.76
Biometry	5	3.40	1.14	5	2.60	.89
Biological Systems Engineering	12	3.17	.83	14	3.36	.93
Plant Pathology	4	4.25	.96	4	4.00	.82
Total Mean	208†	3.40	1.05	161	2.31***	1.30

Note.

1.0 = Very great extent; 2.0 = Great extent; 3.0 = Some extent; 4.0 = Small extent;
5.0 = Not at all

***$p < .001$ by T test

†Total N for Pre-test includes departments not in Posttest.

Table 9

Pre-test and Post-test Mean Scores for:
Amount of Time Department Head Spoke to Faculty about
Research in Annual Review of Goals
by College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	130	3.16	1.11	101	3.59	1.11
CASNR	79	2.65	.97	57	3.14	1.09
Department:						
Three Years:						
English	34	2.97**	1.06	40	3.55	1.17
Psychology	15	3.47	1.60	16	3.69	1.19
Agricultural Education	9	3.11	.60	8	3.61	.92
Agronomy	28	2.43**	.92	25	3.24	1.13
Two Years:						
Geology	10	3.10	.67	5	2.80	.45
Mathematics	30	2.90	.84	26	3.31	1.01
Political Science	11	4.27	.90	14	4.43	.76
Biometry	5	3.00	1.72	5	2.60	.89
Biological Systems Engineering	12	2.83	.83	15	2.87	1.19
Plant Pathology	4	2.25	1.25	4	3.25	.50
Total Mean	209†	2.97**	1.08	158	3.43	1.12

Note.

1.0 = Very great extent; 2.0 = Great extent; 3.0 = Some extent; 4.0 = Small extent;
5.0 = Not at all

**$p < .01$ by T test

†Total N for Pre-test includes departments not in Posttest.

Table 10

Pre-test and Post-test Mean Scores for Subscale:
Faculty Peers and Self Expend Effort in Working with Students
by College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	136	2.10	.63	110	2.40	.64
CASNR	85	2.17	.61	58	2.32	.59
Department:						
Three Years:						
English	36	1.98***	.63	43	2.78	.32
Psychology	15	2.57	.66	17	2.85	.38
Agricultural Education	9	2.00***	.48	8	2.71	.27
Agronomy	29	2.29	.58	25	2.55	.45
Two Years:						
Geology	10	2.46	.44	5	2.17	.40
Mathematics	30	2.03	.55	[illegible]	1.98	.60
Political Science	12	2.11	.68	14	1.68**	.50
Biometry	6	2.05	.49	5	2.20	.83
Bio Systems Engineering	13	1.99	.55	16	1.81	.52
Plant Pathology	5	2.99	.77	4	2.22*	.58
Total Mean	221†	2.13***	.62	168	2.37	.62

Note.
Combined Questionnaire Items 38-43, 45-51

1.0 = Strongly Agree; 2.0 = Agree; 3.0 = Undecided; 4.0 = Disagree; 5.0 = Strongly Disagree

*p < .05; **p < .01; ***p < .001 by T test

†Total N for Pre-test includes departments not in Posttest.

Table 11

Pre-test and Post-test Mean Scores for Subscale:
The Present System of Evaluation is Adequate and Valid
by College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	133	3.15	.79	107	2.88**	.68
CASNR	83	3.36	.65	58	2.95**	.56
Department:						
Three Years:						
English	35	2.93	.77	43	3.09	.54
Psychology	15	3.76	.58	16	2.99***	.45
Agricultural Education	9	3.65	.61	8	2.93*	.51
Agronomy	27	3.30	.74	25	2.95*	.46
Two Years:						
Geology	10	3.33	.72	5	2.73	1.03
Mathematics	30	2.77	.66	27	2.79	.80
Political Science	12	2.71	.73	14	2.36	.69
Biometry	6	3.31	.43	5	3.07	.54
Biological Systems Engineering	13	3.58	.67	16	2.86**	.72
Plant Pathology	5	3.63	.49	4	3.21	.66
Total Mean	216†	3.23	.75	165	2.90**	.64

Note.
Combined Questionnaire Items 65, 66, 68, 69

1.0 = Strongly Agree; 2.0 = Agree; 3.0 = Undecided; 4.0 = Disagree; 5.0 = Strongly Disagree

*p < .o5; **p < .01; ***p < .001 by T test

†Total N for Pre-test includes departments not in Posttest.

Table 12

Pre-test and Post-test Mean Scores for:
Departmental Evaluation System Validly Measures Effective Teaching
by College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	132	3.00	1.18	103	2.67**	1.16
CASNR	81	3.20	.99	56	2.50**	1.12
Department:						
Three Years:						
English	35	2.57	1.21	41	2.97	.99
Psychology	15	3.53	1.06	15	2.13***	1.30
Agricultural Education	9	3.78	1.09	7	3.00	1.63
Agronomy	26	3.15	1.15	24	2.12***	.94
Two Years:						
Geology	10	3.10	.88	5	2.80	1.48
Mathematics	30	2.67	1.12	28	2.75	1.14
Political Science	12	2.50	.90	14	2.14	1.17
Biometry	6	3.00	.00	5	3.00	.71
Biological Systems Engineering	12	3.33	.78	16	2.62	1.09
Plant Pathology	5	3.60	1.14	4	2.75	1.50
Total Mean	213†	3.08	1.11	159	2.61**	1.15

Note.

1.0 = Strongly Agree; 2.0 = Agree; 3.0 = Undecided; 4.0 = Disagree; 5.0 = Strongly Disagree

***p < .001 by T test

†Total N for Pre-test includes departments not in Posttest.

Table 13

Pre-test and Post-test Mean Scores for:
Merit Increases Should Be Tied to Performance in Teaching
by College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	131	2.24	1.22	102	2.30	1.09
CASNR	74	2.70	.98	56	2.96	.99
Department:						
Three Years:						
English	34	1.19***	.99	42	2.83	1.03
Psychology	15	2.67	1.45	16	2.50	1.03
Agricultural Education	9	2.67	1.00	8	2.63	1.19
Agronomy	22	2.54	.96	23	2.91	.79
Two Years:						
Geology	10	3.10	1.29	5	2.40	1.34
Mathematics	29	2.00	1.13	26	1.69	.84
Political Science	12	1.33	.49	13	1.46	.66
Biometry	5	3.20	.84	5	3.40	1.51
Biological Systems Engineering	11	2.54	.93	16	2.88	1.02
Plant Pathology	5	4.20	1.09	4	3.75	.50
Total Mean	205†	2.41	1.15	158	2.53	1.10

Note.

1.0 = Strongly Agree; 2.0 = Agree; 3.0 = Undecided; 4.0 = Disagree; 5.0 = Strongly Disagree

***$p < .001$ by T test

†Total N for Pre-test includes departments not in Posttest.

Table 14

Pre-test and Post-test Mean Scores for Subscale:
Teaching is Rewarded in the Tenure System
by College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	136	2.57	.84	111	2.02***	.64
CASNR	84	2.75	.66	58	2.40***	.79
Department:						
Three Years:						
English	36	2.49	.78	43	2.30	.56
Psychology	15	2.73	.52	17	1.67***	.37
Agricultural Education	9	2.82	.34	8	2.84	.78
Agronomy	28	2.63	.74	25	2.16**	.48
Two Years:						
Geology	10	2.80	.76	5	2.60	.87
Mathematics	30	1.97	.64	32	1.75	.60
Political Science	12	2.47	.93	14	1.99	.70
Biometry	6	2.89	.40	5	2.40	.89
Biological Systems Engineering	13	2.87	.72	16	2.58	.90
Plant Pathology	5	2.87	.96	4	2.34	1.61
Total Mean	220†	2.64	.78	169	2.15***	.72

Note.
Combined questions: 35, 37

1.0 = Strongly Agree; 2.0 = Agree; 3.0 = Undecided; 4.0 = Disagree; 5.0 = Strongly Disagree

**p < .01; ***p < .001

†Pre-test total N includes 2 departments that were in Pre-test only.

Table 15

Pre-test and Post-test Mean Scores for:
Faculty Receive Release Time and Other Support to
Develop New Ways of Teaching
by College and Department (1989-1992)

College/Department	Pre-test N	Pre-test Mean	Pre-test S.D.	Posttest N	Posttest Mean	Posttest S.D.
College:						
Arts/Sciences	129	3.24	1.02	98	2.88	1.25
CASNR	77	3.17	.77	57	2.74	.99
Department:						
Three Years:						
English	35	3.03	1.01	41	2.39**	1.24
Psychology	15	3.60	.78	16	2.50**	1.09
Agricultural Education	9	3.00	.50	8	2.13*	1.13
Agronomy	25	3.08	.81	24	2.50*	1.10
Two Years:						
Geology	10	4.10	.99	5	3.36	.55
Mathematics	28	3.36	.99	24	3.58	1.02
Political Science	11	2.73	.90	12	3.33	1.23
Biometry	6	3.33	.82	5	3.20	.84
Biological Systems Engineering	10	3.20	.42	16	3.19	.66
Plant Pathology	5	4.00	1.00	4	3.00	.00
Total Mean	206†	3.21	.93	155	2.83***	1.56

Note.

1.0 = Strongly Agree; 2.0 = Agree; 3.0 = Undecided; 4.0 = Disagree; 5.0 = Strongly Disagree

*p < .05; ***p < .001 by T test

†Total N for Pre-test includes departments not in Posttest.

REFERENCES

AAC Report. (1985). Integrity in the college curriculum; a report to the academic community. Washington, D.C.: Association of American Colleges.

Aleamoni, L.M. (1981). Student ratings: myth vs. research facts. Note to the Faculty. University of Arizona, Tucson: Instructional Research and Development Center.

Bassis, M.S. (1986). The quality of university education: toward an agenda for equity and action. Teaching Sociology 14(1), 1-11.

Bennett, W.H. (1984). To reclaim a legacy. Washington, D.C.: National Endowment for the Humanities.

Blackburn, R.T., et. al. (1987). Faculty as a key resource. The University of Michigan, Ann Arbor: National Center for Research to Improve Postsecondary Teaching and Learning (NCRIPTAL)

Blackburn, R.T. and Pitney, J.A. (1988). Performance appraisal for faculty: Implications for higher education. University of Michigan, Ann Arbor: NCRIPTAL.

Bowen, H.R. and Schuster, J.H. (1986). American professors: A national resource imperiled. New York, NY: Oxford University Press

Boyer, E.L. (1987). The undergraduate experience in America. The Carnegie Foundation for the Advancement of Teaching. New York: Harper & Row.

Boyer, E.L. (1990). Scholarship reconsidered: Priorities of the professoriate. Princeton, N.J.: Carnegie Foundation for the Advancement of Teaching.

Braskamp, L.A., Brandenburg, D.C., & Ory, J.C. (1984). Evaluating teaching effectiveness: A practical guide. Beverly Hills, CA: Sage.

Brown, R.D., Sime, W.E., Ihle, G.M. (1990). "Faculty percetions of the annual review process: A summary report of research findings at UN-L." Unpublished paper.

Chickering, A.W. and Gamson, Z. (1987). Seven principles for good practice in undergraduate education. AAHE Bulletin, 39(7), 3-7.

Chickering, A.W., Gamsom, Z., Barsi, L.M. (1989). Faculty inventory: 7 principles for good practice in undergraduate education. Racine, Wi: Johnson Foundation, Inc.

Doyle, K.O. (1982). Evaluating teaching. Lexington, MA: D.C. Heath.

Edgerton, R., Hutchings P., Quinlan K. (1991). The teaching portfolio: Capturing the Scholarship in Teaching. Washington, DC: American Association for Higher Education.

Feldman, K.A. (1989). The association between student ratings of specific instructional dimensions and student achievement: Refining and extending the synthesis from multisection validity studies. Research in Higher Education, 30, 137-194.

Hildebrand, M. (1973). The character and skill of the effective professor. Journal of Higher Education. 50, 670-683.

Katz, J. (1988). Turning professors into teachers -- a new approach to faculty development and student learning. American Council on Education. New York: MacMillan.

Magnesen, K.O. (1987). Faculty evaluation, performance, and pay: application and issues. Journal of Higher Education. 44,41-50.

Marsh, H.W. (1984). Students' evaluations of university teaching: dimensionality, reliability, validity, potential biases, and utility. Journal of Educational Psychology, 76, 707-754.

Marsh, H.W. (1987). Students' evaluations of university teaching: research findings, methodological issues, and directions for future research. International School of Educational Research, 11, 253-388.

McClain, C.R. (1987). "A study to determine the perceptions of faculty at the university of Nebraska-Lincoln concerning teaching, promotion and tenure." University of Nebraska-Lincoln: Teaching and Learning Center. Unpublished.

Menges, R.J. (1987). Colleges as catalysts for change in teaching. In To Improve the Academy (a publication of the Professional and Organizational Development Network in Higher Education). Pp. 83-93.

Miller, R.I. (1987). Evaluating faculty for promotion and tenure. San Francisco: Jossey-Bass.

Millman, J. (Ed.). (1981). Handbook of teacher evaluation. Beverly Hills, CA: Sage Publications. 78-89.

Mortimer, K.P., et. al. (1984). Involvement in learning: realizing the potential of American higher education. Study Group on the Conditions of Excellence in American Higher Education. Washington, D.C.: National Institute of Education.

Seldin, P. (1980). Successful faculty evaluation programs: a practical guide to improve faculty performance and promotion/tenure decisions. Crugers, NY: Coventry Press.

Seldin, P. (1984). Changing practices in faculty evaluation. San Francisco: Jossey-Bass.

Seldin, P. (1994). Successful use of teaching portfolios. Boton, MA: Anker.

Sherman, T., Armistead, L.P., Fowler, Forest, Barksdale, M.A. Reif, G. (1987). The quest for excellence in university teaching. Journal of Higher Education. 48(1), 66-84.

List of Departments Represented in this Study

In three years, 28 departments in five colleges participated in the FIPSE Project. Those departments highlighted (Project Years 1 & 2) participated in this Study:

College of Arts & Sciences:

Anthropology
Art & Art History
Biological Sciences
English
Geology
Geography
History
Mathematics & Statistics
Music
Political Science
Psychology
Sociology

College of Agricultural Sciences & Natural Resources:

Agricultural Communications
Agricultural Economics
Agricultural Education
Agronomy
Animal Sciences
Biological Systems Engineering
Biometry
Food Science and Technology
Forestry, Fisheries & Wildlife
Horticulture
Plant Pathology
Veterinary Science

College of Engineering & Technology:

Industrial and Management Systems Engineering

Teachers College:

Curriculum and Instruction
Special Education and Communication Disorders

College of Dentistry (University of Nebraska Medical Center):

Adult Restorative Dentistry

Rewarding Teaching Project Questionnaire

Note: The purpose of this questionnaire is to determine the climate for teaching at this University. Your responses will provide a basis for developing improvements in the reward structure. Some questions used were adapted from other questionnaires: A. Chickering, et. al., An Inventory of Good Teaching Practices; R. Brown, Research on Faculty Reaction to Annual Review; C. McClain, Promotion, Tenure Survey.

Please put your answers on the mark-sense form with a #2 pencil. DO NOT put your name on the answer sheet. Put the last 4 digits of your social security number in k l m n in the special code section, bottom left of the answer sheet. This is needed for statistical purposes only.

PART I - GENERAL

Begin with #1 on your answer sheet.

1. What is your present position?
   - A. Administrator other than Chair
   - B. Full-time faculty
   - C. Department Chair
   - D. Part-time faculty

2. Are your presently:
   - A. Tenured
   - B. Non-Tenured, but on tenure track
   - C. Not on tenure track

3. What is your present academic rank?
   - A. Professor
   - B. Associate Professor
   - C. Assistant Professor
   - D. Instructor

4. At what levels do you hold teaching assignments?
   - A. Graduate only
   - B. Graduate & Undergraduate
   - C. Undergraduate only
   - D. None

5. Your department:
   - A.
   - B.
   - C.
   - D.

6. Your department:
   - A.
   - B.
   - C.
   - D.

7. Your department:
   - A.
   - B.
   - C.
   - D.

Approximately how are each of the following activities distributed within your present assignment? Please indicate your answer for each question on the mark-sense sheet provided.

		75-100%	50-74%	25-49%	0-24%
8.	Research	A	B	C	D
9.	Teaching	A	B	C	D
10.	Service	A	B	C	D
11.	Administration	A	B	C	D

12. Disregarding institutional or peer influence, my personal interests in teaching and research lie primarily as follows:
   - A. Interest very heavy toward research.
   - B. Interest in both, but leaning toward research.
   - C. Interest in both, but leaning toward teaching.
   - D. Interest very heavy toward teaching.

Within your Department, what factors are principally considered in evaluating a faculty member for tenure? Please indicate the importance of each factor on the mark-sense sheet provided.

		Department			
		Major Factor	Minor Factor	Not A Factor	Don't Know
13.	Classroom teaching	A	B	C	D
14.	Research	A	B	C	D
15.	Supervision of graduate study	A	B	C	D
16.	Publication	A	B	C	D
17.	Student advising	A	B	C	D
18.	Length of service in rank	A	B	C	D
19.	Competing job offers	A	B	C	D
20.	Personal attributes	A	B	C	D

Please indicate the frequency with which each of the following factors is used to evaluate teaching effectiveness within your Department.

		Department			
	Factor	Frequently Used	Sometimes Used	Not Used	Don't Know
21.	Formal student rating	A	B	C	D
22.	Informal student opinions	A	B	C	D
23.	Peer evaluation	A	B	C	D
24.	Student final grade distribution	A	B	C	D
25.	Self evaluation report	A	B	C	D
26.	Colleagues; opinions	A	B	C	D
27.	Scholarly research & publication	A	B	C	D
28.	Chairman evaluation	A	B	C	D
29.	Dean evaluation	A	B	C	D
30.	Committee evaluation	A	B	C	D
31.	Course syllabi	A	B	C	D
32.	Course materials and Exam	A	B	C	D
33.	Class enrollment	A	B	C	D

PART II - TENURE/PROMOTION

Please express your personal judgment/opinion on the following questions regardless of the present policies and practices within your department. Please respond to each of the items listed below using the format shown below.

SA=Strongly Agree A=Agree U=Undecided D=Disagree SD=Strongly Disagree

		SA	A	U	D	SD
34.	Research should be an important factor in order to gain tenure.	A	B	C	D	E
35.	The tenure objectives at this institution are clear with regard to teaching.	A	B	C	D	E
36.	It is more important to publish than teach well in my department.	A	B	C	D	E
37.	The present tenure system at this University encourages interest in teaching.	A	B	C	D	E

PART III - TEACHING

In this section answer according to practices in your Department.

SA=Strongly Agree A=Agree U=Undecided D=Disagree SD=Strongly Disagree

		SA	A	U	D	SD
38.	Generally speaking, there is not very much contact between professors and undergraduates.	A	B	C	D	E
39.	How best to communicate knowledge to undergraduates is not a question that seriously concerns a large proportion of the faculty.	A	B	C	D	E
40.	Professors get to know most students in their classes quite well.	A	B	C	D	E
41.	Most faculty members do not spend much time in talking with students about students' academic interests and concerns.	A	B	C	D	E
42.	Because of the pressure of other commitments, many professors are unable to prepare adequately for their courses.	A	B	C	D	E
43.	Most faculty members are quite sensitive to the interests, needs, and aspirations of students.	A	B	C	D	E
44.	In recruiting new faculty members, departments generally attach as much importance to demonstrated teaching ability as to potential for scholarly course responsibilities.	A	B	C	D	E
45.	I regularly seek out students who are in difficulty to discuss their study habits, schedules, and other commitments.	A	B	C	D	E
46.	I provide extra material or exercises for students who lack essential background knowledge or skills.	A	B	C	D	E
47.	I regularly attend events sponsored by student groups.	A	B	C	D	E
48.	I return examinations and papers within a week.	A	B	C	D	E
49.	I give students detailed evaluations of their work early in the term.	A	B	C	D	E
50.	I give my students written comments on their strengths and weaknesses on exams and paper.	A	B	C	D	E
51.	I call or write a note to students who miss several classes.	A	B	C	D	E

Note: Answer Format Change

How much experience do you have with the following:

A=Very Often B=Often C=Occasionally D=Rarely E=Never

52.	Attending a seminar on or reading about how to improve my teaching.	A	B	C	D	E
53.	Talking to colleagues or a teaching/ learning expert about teaching methods.	A	B	C	D	E
54.	Seeking assistance from the campus instructional development center.	A	B	C	D	E
55.	Writing grants to fund projects for "improvement" of teaching methods.	A	B	C	D	E
56.	Updating the content of the courses you teach.	A	B	C	D	E

The following three questions ask about your annual review.

A=To a Very Great Extent B=To a Great Extent C=To some Extent
D=To a Small Extent E=Not at All

(57-58)	How much time did your chair spend talking with you about your goals for next year in...					
57.	...Teaching?	A	B	C	D	E
58.	...Research?	A	B	C	D	E
59.	Do you think better information about your teaching would change your Chair's recommendation?	A	B	C	D	E

PART IV - REWARDS/EVALUATION

Note: Answer Format Change

In your Department, how often are each of the items listed below used?

		Very Often	Often	Occas-ionally	Rarely	Never
60.	Explicit criteria are used for evaluating teaching performance.	A	B	C	D	E
61.	Faculty members receive release time and other support to develop new ways of teaching.	A	B	C	D	E
62.	Faculty members receive adequate feedback concerning their performance as teachers and advisors.	A	B	C	D	E
63.	Annual merit increases are directly tied to faculty performance in teaching.	A	B	C	D	E
64.	This department recognizes advising as a legitimate part of the faculty's work load.	A	B	C	D	E

Note: Answer Format change

Please respond to each of the items listed below using the format shown below.

SA=Strongly Agree A=Agree U=Undecided D=Disagree SD=Strongly Disagree

		SA	A	U	D	SD
65.	The present evaluation system within my department validly measures effective teaching.	A	B	C	D	E
66.	The present evaluation system within my college validly measures effective teaching.	A	B	C	D	E
67.	Merit raises should reflect performance in teaching.	A	B	C	D	E
68.	Student ratings of teaching are a sufficient index of teaching performance.	A	B	C	D	E
69.	Sufficient evidence is currently available to fairly evaluate effective teaching for promotion, tenure and merit decisions.	A	B	C	D	E

PART V - INSTITUTIONAL CLIMATE

		SA	A	U	D	SD
70.	High-ranking administrators or department chairpersons generally encourage professors to experiment with new courses and teaching methods.	A	B	C	D	E
71.	It is almost impossible to obtain the necessary financial support to try out a new idea for educational practice.	A	B	C	D	E
72.	In my experience it has not been easy for new ideas about educational practice to receive a hearing.	A	B	C	D	E
73.	A favorable climate exists within my department for the improvement of teaching.	A	B	C	D	E
74.	A favorable climate exists within my college for the improvement of teaching.	A	B	C	D	E

Thank you for your time and effort.

Appendix C

FIPSE: Rewarding Teaching Project
Interview Questions

i. Information: position re. interview.

1. In this current year, in what ways is teaching activity rewarded in your department? Examples:

2. In this current year, what evidence is being used to judge the quality of teaching?

3. In current practice, how much weight is given to teaching in personnel decisions (research, service, other)?

   a. hiring into a tenure line?

   b. promotion to associate professor?

   c. promotion to full professor?

   d. granting tenure?

   e. distribution of merit pay?

   f. other management decisions?

4. What have you done personally in making personnel decisions to recognize effective teaching? (i.E. hire, promotion, tenure, merit pay, resources). Describe what evidence you used and how you influenced the decision.

5. Do you think your department:

   a. gives sufficient weight to effective teaching in decisions regarding promotion, tenure, merit pay?

   b. should or will give more weight to effective teaching in decisions regarding promotion, tenure, merit pay?

6. What is changing in your department regarding the rewarding of effective teaching? What is the direction of this change? What will it take to bring about change in practice?

7. What problems that currently exist regarding rewards for teaching will be different five years from now?